



## **EARN Maryland 2014 Planning Grant** **Strategic Industry Partnerships**

### **Biotechnology**

#### **1) Baltimore Biotechnology Strategic Industry Partnership**

Lead Applicant: BioTechnical Institute of Maryland, Inc. & Baltimore BioWorks, Inc.  
Co-Conveners: BioTechnical Institute of Maryland, Inc. & Baltimore BioWorks, Inc.

Bioscience in greater Baltimore enjoyed employment growth of 13% in the past decade and is expected to add 6,000 new jobs in the region by 2020. A large percentage of these jobs are non-college degreed positions. This Partnership will address the lack of technically proficient middle-skilled workers in this area by expanding industry- designed vocational training for bio-technicians. Job readiness issues will be explored and recruitment pipelines will likely include several Baltimore City Public Schools.

#### **2) Montgomery County Biotechnology Training Partnership**

Lead Applicant: Montgomery College  
Convener: Montgomery College

It is estimated that 2,000 biotech industry jobs will be added to the 12,000 existing industry jobs in the region by 2025. This Partnership intends to address a lack of practical laboratory experience among recent college graduates and a steady need for a qualified talent pool brought on by growth, attrition and promotion in the target industry. Emphasis will be on assessing entry-level training and job readiness as part of a critical strategy to provide career opportunities and meaningful career pathways.

### **Construction**

#### **3) Prince George's and Charles County Construction Industry Partnership for Jobs**

Lead Applicant: Finishing Trades Institute  
Convener: Washington D.C. Building Trades Council

Major infrastructure projects, including a new casino, a new hospital complex and development of surrounding area Metro Stations, will support a considerable need for ready-to-work construction workers in the target region. This Partnership seeks to address industry workforce shortages reportedly due in part to high drop-out rates in apprenticeship programs. Successful completion of these programs and support for quality pre-apprenticeship programs will be a priority as well as continuing education for incumbent workers. Creative recruitment of non-traditional groups of potential workers -- veterans, women, minorities and ex-offenders -- will be a major focus.

#### **4) BIM Technology for the Incumbent Worker in the Construction Industry**

Lead Applicant: Towson University Division of Innovation and Applied Research  
Convener: Maryland Center for Construction Education & Innovation

Employment in Maryland's construction industry is expected to grow by 8.5% in the coming year, and the projected demand for construction workers may exceed 17,000 openings, including replacement hiring for turnover, by 2020. This Partnership will train incumbent workers in "Building Information Modeling" (BIM), a specific, industry-identified skills need. Professional occupations associated with BIM integration are construction managers, architects and engineers.

#### **5) Project Jump Start Construction Industry Partnership**

Lead Applicant: Associated Builders and Contractors Baltimore Metro Chapter  
Convener: Associated Builders and Contractors Baltimore Metro Chapter

Targeting Baltimore City and Prince George's County, this Partnership tackles the industry workforce shortages noted in the Opportunity Collaborative's recently released "*Regional Talent Development Pipeline Study*." Project JumpStart will implement a pre-apprenticeship model with a strong job readiness push, meant to prepare individuals for the rigors of a trade apprenticeship. The Partnership will pursue a talent pipeline for the unemployed and other underserved populations.

### **Cybersecurity / IT**

#### **6) Central Maryland Cyber/IT Consortium**

Lead Applicant: Anne Arundel Workforce Development Corporation, Inc.  
Convener: Dunbar Digital Armor

This Partnership will focus on key workforce issues facing the cybersecurity industry in Maryland, including inconsistent job descriptions, a lack of clearable candidates and high-level industry job readiness requirements. The Partnership will capitalize on relationships forged through AAWDC's ongoing Pathways to Cybersecurity Careers Consortium Business Advisory Board, encompassing both commercial and Department of Defense cybersecurity perspectives.

#### **7) Western Maryland IT Center for Excellence**

Lead Applicant: Allegany College  
Convener: Exclamation Labs!

Western Maryland has long sought to expand the number of technology-related businesses in the region and has made significant progress building the needed infrastructure. A technology-competent workforce has been a challenge given the area's isolated geography and lack of technical education opportunities. This Partnership aims to address both entry level and incumbent skills training in the industry and lay the groundwork for a potential IT Center for Excellence in the region.

#### **8) 21st Century Technology Business Services Partnership for Prince George's County**

Lead Applicant: Agemo Technology  
Co-Convener: Prince George's Community College & Bowie State University

This Partnership's focus stems from a recent Jacob France Institute report, “*Economic Drivers and Catalysts – a Targeted Economic Development Strategy for Prince George’s County*,” identifying critical occupational specialties in the target sector to fill current and projected workforce shortages in the region. Training in these emerging technologies - desktop mobility, cloud, big data, cybersecurity and networks - will be a priority. Industry partners include women, minority and veteran-owned businesses.

## **Green Industry**

### **9) Water and Wastewater Career Development Partnership of Central Maryland**

Lead Applicant: Maryland Environmental Service (MES)  
Convener: Maryland Environmental Service (MES)

This Partnership seeks to build a ready talent pool with increased expertise in technology, compliance and environmental regulation. It will address barriers to workforce entry and rectify low pass rates on certification exams. Recruiting Maryland’s veterans for training will be a priority.

### **10) Baltimore Regional Green Strategic Industry Partnership**

Lead Applicant: Civic Works  
Convener: Civic Works

The Baltimore region has a high concentration of properties that are environmentally contaminated, energy inefficient, fossil fuel reliant, and generate high levels of storm water runoff. Strong public policies and incentives, as well as increasing consumer awareness, are fueling rapid growth in the green industry. This Partnership will target the workforce needs of various green occupations, including converting non-energy efficient buildings, installing solar energy systems, reducing storm water runoff and remediating contaminated land – with a focus on entry level skills training and incumbent worker training for leadership positions.

### **11) Maryland Offshore Wind Strategic Industry Partnership**

Lead Applicant: Humanim  
Convener: Business Network for Maryland Offshore Wind

The U.S. Department of Labor’s Bureau of Labor Statistics estimates that there will be 450,000 welding jobs available in 2014. An aging workforce, average welders are in their mid-fifties and expected to retire within the next ten years, and a growing demand for welders in the manufacturing and construction industries contributes to the tremendous need for skilled, experienced workers. The State’s recently passed Offshore Wind Energy Act of 2013 will also add welding jobs. This unique Partnership seeks to create a career ladder offering training opportunities in welding from entry level to highly advanced through the shared skills needs of its industry partners.

## **Healthcare**

### **12) Northeast Maryland Health Industry Partnership**

Lead Applicant: Structured Employment Economic Development Corporation  
Convener: Structured Employment Economic Development Corporation

The U.S. Department of Health & Human Services has designated portions of the target region as Health Care Professional Shortage Areas because of a shortfall of qualified labor. Regional employers –

including health care management professionals – have identified a deficiency of candidates with well-developed essential skills, in addition to insufficient technical skills. This Partnership aims to address these workforce needs with an initial occupational focus on EMT/paramedics, medical assistants and medical coders. Other entry-level job growth areas – health information technicians, geriatric nursing assistants and community health workers – will be explored.

### **13) Ready to Care: An Eastern Shore Partnership to Train Healthcare Workers**

Lead Applicant: Eastern Shore Area Health Education Center  
Convener: Eastern Shore Area Health Education Center

Seven counties on the Eastern Shore are designated as Health Care Professional Shortage Areas in primary medical and mental health care. Two of those seven counties are also designated as Medically Underserved Areas. Maryland’s Department of Health & Mental Hygiene has designated an additional two of the seven as Health Enterprise Zones. The Partnership will focus on healthcare service delivery for an aging population, community delivered healthcare, recruiting obstacles for low or no-skilled workers, and a shortage of psychiatric workers.

### **14) Montgomery County Healthcare Practitioners: Rx for Employability**

Lead Applicant: Montgomery Business Development Corporation  
Convener: Montgomery Business Development Corporation

Within the next five years, two new hospital campuses will be opening in Montgomery County. While healthcare occupations are projected to be the largest source of employment growth, some 18% of net new jobs, there is an existing and projected shortage of health care professionals in the region. This Partnership will examine workforce pipeline issues and develop a plan supporting sustainable career pathways. Enhanced training and clinical experiences for incumbent workers will be developed.

### **15) Baltimore Healthcare Partnership**

Lead Applicant: Baltimore Alliance for Careers in Healthcare (BACH)  
Co-Conveners: BACH and Center for Urban Families (CFUF)

The Opportunity Collaborative’s “*Regional Talent Development Pipeline Study*” projects that the target sector will experience a hiring demand of approximately 49,400 workers, including turnover, through the year 2020. This Partnership will build upon the work of CFUF and BACH’s existing industry partnership framework to improve employment prospects for low-skill job seekers and incumbent workers in the Baltimore metro region. Preliminary input from industry cites a lack of essential workplace skills making job readiness an important focus.

### **16) Southern Maryland Healthcare Industry Alliance**

Lead Applicant: Tri County Council  
Convener: College of Southern Maryland

The U.S. Department of Labor’s Bureau of Labor Statistics estimates that industries and occupations related to healthcare and personal care are projected to have the fastest job growth between 2010 and 2020. Healthcare support occupations are expected to grow most rapidly (34.5%), followed by personal care and services occupations (26.8%), and healthcare practitioners and technical operations (25.9 %). Data specific to Southern Maryland exceeds these national averages. Recent merged local hospitals add to these pressing workforce needs. This Partnership will develop a plan to tackle these issues, reaching into the public school system as one possible recruitment pipeline.

### **17) Prince George's and Charles Counties Healthcare Industry Partnership**

Lead Applicant: Associated Black Charities  
Convener: Associated Black Charities

The Opportunity Collaborative's "*Regional Talent Development Pipeline Study*," and a public health impact study focused on Prince George's County by the University of Maryland's School of Public Health, support the region's growing demand for skilled workers in the target industry. In Charles County, total projected occupations for health diagnosing and treating practitioners will increase by 23.5%. Several preliminary issues – more effective communication skills and cultural competencies, inadequate procedures within human resources departments, and job readiness components for targeted populations – will be addressed.

### **Health Information Technology**

#### **18) Health Information Technology Strategic Industry Partnership**

Lead Applicant: Community College of Baltimore County (CCBC)  
Convener: CCBC Continuing Education and Economic Development Division

The healthcare industry is currently challenged with the enormous endeavor of transforming from paper to electronic health records. This Partnership will explore the workforce issues arising from this shift, including confusion around the most appropriate skill sets, the failure to conform job titles with job requirements, and the lack of clear career pathways in this emerging field. The recruiting pipeline will include a focus on individuals with disabilities.

#### **19) Mobile Health Technologies in the Baltimore/Washington Corridor**

Lead Applicant: Howard Community College  
Convener: Maryland Health Tech Coalition

The need for mobile apps is exploding in the healthcare field and the implementation of electronic health records and other innovative solutions that leverage mobile health (mHealth) and wireless medical technology has generated a new industry with unique workforce needs in technology development and delivery of care. This Partnership will examine available training resources, including certifications, degrees, and other learning opportunities and recommend improvements. It will also review anticipated labor market needs of the regional economy based on input from a diverse group of experts in this emerging field.

### **Retail / Hospitality**

#### **20) Baltimore Regional Culinary/ Hospitality Strategic Industry Partnership**

Lead Applicant: Humanim  
Convener: Humanim

According to the Opportunity Collaborative's "*Regional Talent Development Pipeline Study*," the target industry sector is expected to create nearly 40,000 total job opportunities for workers in the Baltimore Region. Despite this growth potential, issues unique to the industry – high rates of employee theft, non-compliance with health and safety regulations, and customer service expectations – threaten economic

sustainability. This Partnership seeks to address these and other industry needs and aims to develop a skills training plan for the long-term unemployed.

### **21) Building Employer Led Alliances for Careers in Hospitality (BEACHES)**

Lead Applicant: Wor-Wic Community College  
Co-Conveners: The Governor's Economic Development Committee of Ocean City  
Maryland & The Carousel Group

The Tri-County Council's "2013 Comprehensive Economic Development Strategy for the Eastern Shore" reports that tourism accounts for 23% of employment in the region. Preliminary workforce assessments show priorities in customer service, building maintenance and supervisory skills. The Partnership also intends to address several job readiness issues including transportation, adult learning, computer skills and work habits.

### **22) Purple Line Skills Training Partnership**

Lead Applicant: CASA de Maryland, Inc.  
Convener: CASA de Maryland, Inc.

Incumbent worker-focused, this Partnership anticipates the revitalization expected from development of the Purple Line in Prince George's County and seeks to provide sustainability skills – business management, accounting, bookkeeping and marketing – to the largely minority-owned, small businesses along the Purple Line.

## **Logistics**

### **23) Maryland Mid-Western Transportation & Logistics (MOVE) Partnership**

Lead Applicant: Montgomery College  
Co-Conveners: Hagerstown Community College and Montgomery College

In August 2013, the American Trucking Association projected that in less than a decade, the trucking industry will be short approximately 300,000 drivers. In much of Western Maryland, the trade, transportation and utilities sector is the largest employment base with 21.9% of jobs. In the Montgomery County region, 20 employers participating in a recent industry forum noted a workforce shortage of 3 to 30 drivers on any given day, identifying more than 500 actual job openings at that time. This Partnership will work to increase the talent pool of commercial drivers, mechanics and supply chain/warehouse labor. Difficulties finding insurance to cover new CDL drivers and access to affordable training are a priority.

### **24) Chesapeake Transportation and Logistics Partnership**

Lead Applicant: Cecil College  
Convener: Mid-Atlantic Transportation and Logistics Institute

The Sage Group's "2012 Labor Market Analysis of the Susquehanna Workforce Investment Area" highlighted logistics as a top growth area. The population densities of Western Maryland and the Upper and Lower shores are expected to grow through 2030, creating new patterns of freight-services demand in the industry. This Partnership intends to tackle key workforce issues in the region including an insufficient number of commercial licensed drivers, lack of essential skills training for both entry level and incumbent workers, and the need for analytical skills and training in the use of technology-based tools. Training veterans will be a focus.

## **Manufacturing**

### **25) Manufacturing Workforce Partnership of Frederick County**

Lead Applicant: Wright Manufacturing  
Convener: Wright Manufacturing

Building on the longstanding accomplishments of the Frederick County Manufacturers Roundtable, this Partnership will investigate shared workforce issues including cultivating maintenance and machining skills, building leadership on production lines and developing a better understanding of lean concepts. The Partnership will look at apprenticeship models and job readiness strategies.

### **26) Shore Manufacturing Strategic Industry Partnership**

Lead Applicant: Chesapeake College  
Convener: Upper Shore Workforce Investment Board

The Manufacturing Skills Standards Council has identified core competencies around critical work functions in the industry, particularly in production. Employers point to a pervasive lack of these basic skills among new hires, including familiarity with safety standards in a manufacturing setting, quality and measurement procedures, attention to quality assurances and maintenance awareness. Sparse training opportunities for the advancement of incumbent workers is a concern and creative solutions to inadequate public transportation will be considered.

### **27) Maryland Manufacturing Incumbent Workforce Training Partnership**

Lead Applicant: Maryland Manufacturing Extension Partnership  
Convener: Maryland Manufacturing Extension Partnership

This proposal targets incumbent workers in the manufacturing industry to address skills gaps in advanced machining, master craftsmen and other areas. The partnership model seeks to alleviate the burden on individual employers of incumbent worker training, such as tuition costs, wages and lost production time.

### **28) Maryland Manufacturing Boot Camp**

Lead Applicant: Maryland Manufacturing Extension Partnership  
Convener: Maryland Manufacturing Extension Partnership

This Partnership will develop a “boot camp” style program meant to increase the skills of potential workers and enhance their employability. The training will involve a baseline skills assessment of essential industry-valued characteristics and instruction in adopting a stronger work ethic, adhering to a professional attitude and learning to solve common workplace problems. Basic math and language skills, communication, and critical manufacturing skills will also be highlighted. The talent pool of program graduates will provide a dedicated worker pipeline for Maryland manufacturers.

## **Marine**

### **29) Marine Trades Industry Partnership**

Lead Applicant: Marine Trade Association of Maryland  
Convener: Marine Trades Association of Maryland

With an aging workforce, the marine trades industry faces a skills shortage for working boatyards, marinas and contractors. This Partnership will also focus on skills related to sophisticated mechanical systems and the evolving skills needs of older incumbent workers. This Partnership also hopes to change incorrect public perception about the vibrancy of its career path, with potential recruitment pipelines among high school students, post secondary graduates and veterans.

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